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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/052,325	03/31/1998	JOHN E. STOCKENBERG	EMC-97-137	9015
24227	7590	11/30/2005		
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748			EXAMINER COLBERT, ELLA	
			ART UNIT 3624	PAPER NUMBER

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/052,325		STOCKENBERG ET AL.	
	Examiner		Art Unit	
	Ella Colbert		3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending. Claim 1 has been amended in this communication filed 07/13/05 entered as Amendment with filing of RCE and Supplemental Response filed 09/08/05.
2. The drawings filed 04/13/05 have been reviewed and the figures 1, 2, 4, 4A, and 5-7 are now legible. However, the drawings still remain objected to for the reasons set forth here below.
3. The 25 USC 112 second paragraph rejection for claim 17 was withdraw in the Advisory action.
4. Applicants' arguments are considered moot in view of the new ground(s) of rejection as set forth here below.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/13/05 has been entered.

Specification

6. The Specification is objected to because element "38" in figure 2; element "28" in figure 3; elements "113", "115", and "117" in figure 4; elements "144", "153", "155", "157", and "164" in figure 4A; and elements "198" and "230" in figure 5 are not found or

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described in the Specification. The acronym, for example, "SSL" should be written as "Secure Socket Layer" (SSL). Applicants' are respectfully requested to review the Specification for other acronyms. Correction is required. See MPEP § 608.01(b).

Drawings

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both "CHU ADPTR" and "Channel adapter"; reference character "32" has been used to designate both "CHU DIR" and "Channel Director"; reference character "26" has been used to designate both "CACHE INDEX DIRECTORY" and "cache memory"; reference character "82" has been used to designate both "SOCKET (AF_INET SOCK STREAM, TCP/IP)" and "First Socket Call". Steps "113, 115, and 117" are missing in drawing figure 4 and steps "153, 155, and 157" are missing in drawing figure 4A. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,862,322) Anglin et al, hereafter Anglin in view of (US 6,092,066) Ofek.

With respect to claim 1, Anglin teaches, teaches, at least one first communication mechanism residing on both the first and second computers for facilitating communications between the first and second processes that are each used with backup or restore operations over the network (col. 10, lines 54-64, col. 11, lines 48-55, and col. 28, lines 45-47); a second communication mechanism residing on both the first and second computers for facilitating communication between the first and second processes through the data storage system (col. 35, lines 47-67). Anglin failed to teach, means within the first and second processes for allowing the first and second processes to determine whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism, and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data storage system. Ofek teaches, means within the first and second processes for allowing the first and second processes to determine

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whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism, and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data storage system (col. 3, lines 27-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a means within the first and second processes for allowing the first and second processes to determine whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism, and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data storage system and to modify in Anglin because such a modification would allow Anglin to have a communication interface linked to the communication interface of the first and second computer system for facilitating processes over a network.

With respect to claim 14, this dependent claim is rejected for the similar rationale given above s for claim 1.

With respect to claim 17, this independent claim is rejected for the similar rationale as given to claims 1 and 14.

With respect to claim 2, Anglin teaches, the first and second processes are part of a backup or restore process (col. 11, lines 48-55).

With respect to claim 3, Anglin teaches, at least one first communication mechanism is a network socket (col. 35, lines 53-67). Network communications and socket calls used over the network are well known to anyone skilled in the art, as described in Applicants' Specification on page 18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first communication mechanism as a network socket and to modify in Anglin in view of his teachings of a high speed communication link to a disk adapter and point-to-point communication links and because such a modification would allow Anglin to have a gateway node for controlling the transfer of files to and from a given network.

With respect to claim 4, Anglin teaches, the second communication mechanism is a data storage system socket (col. 35, lines 47-52).

With respect to claim 5, Anglin teaches, the backup and restore operations are capable of backing up and restoring information from a file system (col. 8, lines 6-54 and col. 10, line 54-col. 11, line 17). However, Anglin does not specifically disclose the system is a file system but a data storage system can be used to store files (defined as "blocks of information

stored on disk, tape, or similar media containing a program, a document, or a collection of data”).

With respect to claim 6, Anglin failed to teach, (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system (col. 5, lines 25-47). Ofek teaches, (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system (col. 5, lines 25-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to establish in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system and to modify in Anglin because such a modification would allow Anglin to connect to a client and then to a server where the data is stored on a network.

This claim is rejected for the similar rationale as given above for claim 1.

With respect to claim 15, this claim is rejected for the similar rationale as given above for claims 1- 6.

This claim is also rejected for the similar rationale given for claim 6

With respect to claim 16, this dependent claim is rejected for the similar rationale given to claim 5.

With respect to claim 18, this dependent claim is rejected for the similar rationale as given above for claim 3.

With respect to claim 19, this dependent claim is rejected for the similar rationale as given above for claim 4.

With respect to claim 20, this dependent claim is rejected for the similar rationale as given above for claim 5.

10. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,862,322) Anglin et al, hereafter Anglin in view of (US 6,092,066) Ofek and further in view of (US 5,889,943) Ji et al, hereafter Ji.

With respect to claim 7, Anglin and Ofek failed to teach, creating a first pair of communication mechanisms on a designated port of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers. Ji teaches, creating a first pair of communication mechanisms on a designated port, of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different

computers and a second communication mechanism on said designated port of another computer of said different computers (col. 11, lines 14-53). It would have been obvious to one having ordinary skill in the art at the time the invention was made to creating a first pair of communication mechanisms on a designated port, of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and to modify in Anglin because such a modification would allow Anglin to have a first command port for communication between client task(s) and the SMTP proxy server and the SMTP proxy server spawns an SMTP daemon or SMTP server.

With respect to claim 8, Anglin and Ofek failed to teach, requesting the first communication mechanism pair a connection to the second communication mechanism pair and in response to the connection request, accepting the connection request. Ji teaches, requesting the first communication mechanism pair a connection to the second communication mechanism pair (col. 10, lines 6-29) and in response to the connection request, accepting the connection request (col. 10, 31-34 and lines 49-55). This dependent claim is also rejected for the similar rationale as claim 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to request the first communication mechanism pair a

connection to the second communication mechanism pair and in response to the connection request, accepting the connection request and to modify in Anglin because such a modification would allow Anglin to have a data transfer request and file name sent first to the FTP daemon and then on to the server.

With respect to claim 9, Anglin and Ofek failed to teach, creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of communication mechanisms. Ji teaches, creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of communication mechanisms (col. 10, lines 54-55 and col. 11, lines 4-53).

This dependent claim is also rejected for the similar rationale given for claim 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of communication mechanisms and to modify in Anglin because such a modification would allow Anglin to send the file through the third port to the FTP proxy server and through the second port on the FTP proxy server and finally through the first port to the client task.

With respect to claim 10, Anglin and Ofek failed to teach, requesting with the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms. Ji teaches, requesting with the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms (col. 12, lines 1-17).

This dependent claim is rejected for the similar rationale given for claim 8. It would have been obvious to one having ordinary skill in the art at the time the

invention was made to request the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms and to modify in Anglin because such modification would allow Anglin to transmit through the second command port to the SMTP daemon and to create a third command port and to bind the server task to the third command port to establish communications between the server and the SMTP daemon.

With respect to claim 11, Anglin and Ofek failed to teach, creating a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication mechanism. Ji teaches, creating a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication mechanism (col. 8, lines 59-67 and col. 9, lines 1-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication mechanism and to modify in Anglin because such a modification would allow Anglin to have a third command port to the SMTP daemon with the SMTP daemon creating a third command port for communication with the SMTP daemon for transmission through the third command port to the server task..

With respect to claim 12, Anglin and Ofek failed to teach, requesting the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms. Ji teaches, requesting the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms (col. 8, lines 18-54).

This dependent claim is rejected for the similar rationale given for claims 8, 10, and 11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to request the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms and to modify in Anglin because such a modification would allow Anglin to perform file transfers from a controlled domain of a network across a medium to another network (a file transfer from a node of the second network across the media to a second node of the third network).

With respect to claim 13, Anglin teaches, receiving information about a group of resources in the data storage system (col. 11, line 59-col. 12, line 19). Anglin and Ofek failed to teach, in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism and connecting the first communication mechanism and the second communication mechanism of the

fourth pair of communication mechanisms to each other through the data storage system. Ji teaches, in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism (col. 9, lines 51-67); and connecting the first communication mechanism and the second communication mechanism of the fourth pair of communication mechanisms to each other through the data storage system (col. 10, lines 18-31 and lines 49-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism and connecting the first communication mechanism and the second communication mechanism of the fourth pair of communication mechanisms to each other through the data storage system and to modify in Anglin because such a modification would allow Anglin to have the file transferred through the proxy server through the first port to the client task then the task is passed from the client to the FTP proxy server, then to the FTP daemon and to the server task which in response sends the file through the third port to the FTP daemon and through the second port on to the FTP proxy server and finally through the first port to the client task.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

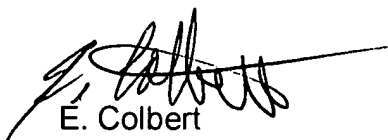
Henderson et al (US 5,550,976) disclosed shared electronic storage devices permitting data archival, accountability, security, encryption and decryption, compression and decompression, and multi-processing capabilities.

Inquiries

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Tuesday-Thursday, 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


E. Colbert
Primary Examiner
November 26, 2005